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ACCIDENT SUMMARY



PREPARED BY THE U.S. ARMY BOARD FOR AVIATION ACCIDENT RESEARCH, FORT RUCKER, ALABAMA

#### **OV-1 ACCIDENT SUMMARY**

1 July 1966 through 30 June 1967

by P. R. Thompson

Publications and Graphics Division



COLONEL RUSSELL P. BONASSO Director

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### OV-1 ACCIDENT SUMMARY

#### 1 JULY 1966 THROUGH 30 JUNE 1967

#### INTRODUCTION

This summary was prepared to help commanders at all levels, aviation safety officers, maintenance officers, aviators, and related aviation personnel to prevent future accidents and preserve combat resources through a review of OV-1 mishaps and their cause factors. The term "mishap" as used in this summary, includes accidents, incidents, forced landings, and precautionary landings, as defined by paragraph 7, AR 385-40. Aircraft losses or damages which were the direct result of hostile action in RVN are not included. Information presented in this summary was taken from accident and other mishap reports submitted from all Army commands, as required by section IV, AR 385-40. Information on Modification Work Orders (MWO's) was extracted from Department of the Army Pamphlet No. 310-7. U. S. Army Equipment Index of Modification Work Orders, April 1968. Technical Bulletin information was furnished by USAAVCOM.

#### **STATISTICS**

Table 1 shows total OV-1 mishaps for the past 4-year period ending with FY 1967. While major accidents were up two in FY 1967, the accident rate per 100,000 flying hours, shown in table 2, decreased 1.5 since FY 1966. There were no minor accidents for FY 1967. The overall accident rate has decreased 30.9 since FY 1964. About 82% (250) of the mishaps for the overall period were incidents, forced landings, and precautionary landings.

Incidents, mishaps resulting in damage which does not meet accident classification criteria, were up 8 (53%) during FY 1967. The increased cost of accidents and incidents, up \$236,000 (4%) over FY 1966, is shown in table 3. OV-1 mishap costs accounted for about 6% of the \$96,000,000 total cost of all Army aircraft mishaps during FY 1967.

Table 4 shows the number of occupants aboard for all accidents and the number sustaining fatal and

nonfatal injuries. Of the 11 FY 1967 accidents, 8 (73%) were survivable. Overall, 68% (37) of 54 accidents were survivable.

There were four ejections during FY 1967, resulting in four minor injuries. Overall, as shown in table 5, there were 17 seat ejections and one fatality. This fatality resulted from ejecting outside the operating envelope of the ejection seat. Overall ejection experience shows that 94% of all ejections were successful.

#### CAUSE FACTORS

Accident cause factors are vital to the prevention effort. Information gained through accident experience must be used in the design, development, and safety engineering of Army aircraft and associated equipment. Personnel training and maintenance and operating procedures must be continually updated to apply the lessons learned through this experience. The cost of modern aircraft and the expense of training personnel make the full use of this information necessary.

Human error is the largest single cause factor for all aircraft accidents and offers the most fertile field for accident prevention. Accidents resulting from human error can be substantially reduced through training, safety education, and a comprehensive standardization program. Materiel failure, the second largest cause factor, can also be reduced if Equipment Improvement Recommendations (EIR's), DA Form 2407, are submitted to responsible agencies for corrective action. The importance of the EIR program cannot be overemphasized. Accidents resulting from materiel failure can only be prevented through design improvements of aircraft and associated equipment.

The majority of the OV-1 mishaps during FY 1967 were caused by human error and materiel failure, as representative of most aircraft mishaps. OV-1 materiel failures were more predominant than

TABLE 1
Total OV-1 Mishaps

FY	MAJ	MIN	INCD	F/L	P/L	TOTAL
1964	17	1	26	17	27	88
1965	14	2	21	7	39	83
1966	9	0	15	0	40	64
1967	11	0	23	0	35	69
TOTAL	51	3	85	24	141	304

TABLE 2

OV-1 Accident Rates Per 100,000 Flying Hours

FY	No. of Acdts	Hr. Flown	Rate
1964	18	34,565	52.1
1965	16	41,084	38.9
1966	9	39,678	22.7
1967	11	51,933	21.2
TOTAL	54	167,260	32.3

TABLE 3
Approximate Mishap Costs

i	OV-1 Misha	os	1	All Army
FY	Worldwide Less RVN	RVN	Total	Aircraft Mishaps
1964	\$12,402,000	\$ 2,500	\$12,404,500	\$ 33,505,000
1965	5,878,000	14,000	5,892,000	34,334,000
1966	3,865,000	1,720,000	5,585,000	53,000,000
1967	982,000	4,839,000	5,821,000	96,000,000
TOTAL	\$23,127,000	\$6,575,500	\$29,702,500	\$216,839,000

TABLE 4
OV-1 Occupant Injuries

	Ac	dts	1	Injury C	lassificati	ion	Personnel on	Personnel on
FY	S	NS	Fatal	Major	Minor	No Injury	Board Surv Acdts	Board N/S Acdts
1964	12	6	8	6	3	17	22	12
1965	12	4	4	0	2	23	22	7
1966	5	4	5	5	0	6	8	8
1967	8	3	8	0	4	10	16	6
TOTAL	37	17	25	11	9	56	68	33

S - Survivable N/S - Nonsurvivable

human error in incidents and precautionary landings. Other mishap cause factors include inadequate and improper maintenance; inadequate facilities, supervision, and unit training; weather; and materiel malfunction. Selected briefs of FY 1967 OV-1 mishaps, representative of the most frequently recurring types and cause factors, are presented in this summary.

Cause factors for many mishaps were reported as "suspected" or "unknown," with no supplemental information. For an effective safety program, specific cause factors must be known and reported. Insufficient information or lack of supplemental information about specific cause factors results in wasted effort, time, and resources.

The chance to gain prevention information from forced and precautionary landings is much greater than that for other mishaps because the crews involved in these were able to successfully cope with inflight emergencies and land without damage. If the full circumstances that brought about the emergencies and the techniques used to cope with them could be shared and learned by all, Army aviators would be in a far better position to prevent accidents from similar factors.

#### CONCLUSIONS

A concerted effort on the part of commanders and supervisors at all levels is needed to achieve a more

effective safety program. This can best be accomplished through:

Knowledge of past mishap experience and cause factors, available through aircraft accident summaries such as this, weekly and monthly mishap summaries, and the Crash Sense Department of the U. S. ARMY AVIATION DIGEST. Distribution of weekly and monthly summaries may be obtained by writing to: Director, USABAAR, ATTN: P & G, Fort Rucker, Alabama 36360. Distribution of the U. S. ARMY AVIATION DIGEST may be obtained by submitting DA Form 12-4 in accordance with instructions on the back of the form.

Prevention Surveys conducted on a revolving basis to isolate potential hazards in facilities, equipment, and personnel. Copies of the Aircraft Accident Prevention Survey prepared by USABAAR may be obtained by writing to: Director, USABAAR, ATTN: P&G, Fort Rucker, Alabama 36360.

Effective Prevention Planning, as outlined in part 1, AR 95-5.

Implementation of Unit Safety Programs, as outlined in appendix VI, AR 95-5.

Increased Command Emphasis on investigation and reporting of incidents, forced landings, and precautionary landings, to include all information required by paragraph 23e, AR 385-40.

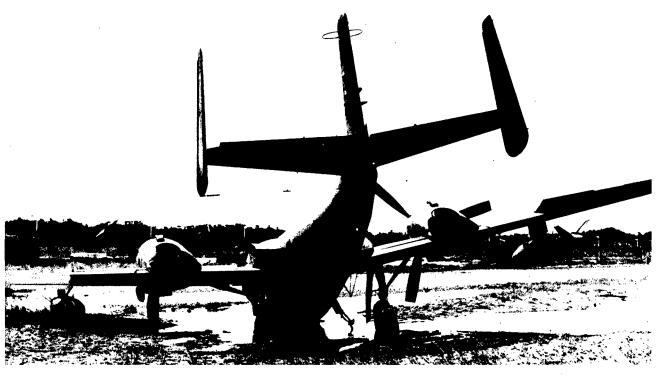
TABLE 5
OV-1 Seat Ejections

FY	Ejections	Injuries		Fatalities	No Injuries	Missing	
		Maj.	Min.				
1964	8	1	6	0	1	9	
1965	3	0	2	1	0	0	
1966	2	0	2	0	0	0	
1967	4	0	4	0	0	0	
TOTAL	17	1	14	1	1	0	

# Selected Major Accident Briefs

F495-Odor was detected in cockpit and hydraulic pressure on both gauges dropped to zero. Flight was continued to burn off fuel in drop tanks, and approach was made, using emergency blowdown bottle to lower gear. Nose gear and right main gear locked, but left main gear failed. Right rudder was applied, and aircraft was vawed until left gear locked into place. A GCA, due to heavy rain and visibility, was made to a PSP, and two go-arounds were made before aircraft was aligned with PSP. Due to loss of hydraulic pressure, pilot had no power steering, power brakes, flaps, or windshield wipers. Landing light was turned off because of glare, and aircraft touched down about 1,000 feet down runway at 110 knots. Props were reversed and aircraft swerved left. Reverse power was reduced on No. 1 engine to idle reverse, and reverse power was pulled into No. 2 engine. Full right rudder, right aileron, and right brake were applied, but aircraft ran off runway, hitting rocks and sand. Nosewheel collapsed and aircraft slid on SLAR antenna. Full aft elevator was pulled and left main gear dropped into a concrete-lined hole, breaking gear, shoving it through wing and severing SLAR antenna. Left prop struck ground and aircraft came to rest on left tip tank, nose, and right main gear. Both engines were shut down and attempts to feather were ineffective, because No. 1 propeller was striking the ground and No. 2 could not be pulled all the way in, due to lever catching on emergency gear blowdown handle. Caused by turning off battery switch before propeller could complete its travel while attempting to feather from reverse position, and failing to pull handle far enough or hold it long enough to completely lock the blowdown valve open and allow full available pressure. The bottle still contained 1,500 pounds of pressure and blowdown valve was in closed position. The hydraulic filters were dirty and the fluid was contaminated with debris and water. Two filters were not safetied and fluid starvation caused a vacuum in the pump. Small leaks were found throughout the system.

G757-Crew of No. 2 aircraft in formation of two thought they detected an electrical fire odor. Pilot asked flight leader to drop behind and check for smoke or fire. Neither was visible. No. 1 then passed under No. 2 to regain original formation. Vertical stabilizer of No. 1 collided with underside of flaps and right inboard aileron of No. 2 and damaged right propeller, right cockpit hatch, and underside of fuselage and wings. Tail section of No. 1 separated and aircraft entered steep dive, exploding on impact and killing pilot and observer. No. 2 landed without further damage. Caused by pilot of No. 1 aircraft passing directly below and close to



F495



G922

No. 2 aircraft. Other factors were (1) failure to maintain continous visual contact in close formation, (2) failure of flight leader to establish safe procedure for changing positions, and (3) lack of knowledge about aerodynamic effects produced by two aircraft in close proximity.

G922-A VFR landing was attempted in poor visibility and heavy rain. GCA equipment was inoperative. Pilot made 360° turn 3 miles out on right base to let helicopter land. Forward visibility was zero and pilot lost sight of runway. Looking outside and using familiar ground references, pilot turned final. When runway was sighted, aircraft was off center and high. He made 180° turn and entered on left downwind for runway. Pilot told tower he was turning final with gear and pressure, and attempted to line up with runway by looking out the side. Tower would not clear aircraft for landing because of poor visibility. Pilot, thinking he had only 20 minutes of fuel left and that weather would get worse, continued on final. He sighted runway and thought he was at approach end, but he was actually about 1,800 feet Aircraft touched down with full flaps and swerved left, then skidded right before control was Runway was 6,000 feet of PSP. Only 3,000 feet were available due to resurfacing. There was not enough room to go around. One piece of PSP was not interlocked with the adjoining piece, and protruded, causing all three gears to hang as aircraft crossed with brakes locked. Aircraft hit construction area and gear collapsed. Damage was so extensive that only the engines could be salvaged. Caused by attempting to remain VFR in IFR conditions. Other factors were weather, improperly installed PSP, and lack of overrun.

**H433-**No. 1 engine chip detector warning light came on, explosion was heard, and aircraft yawed. Power levers were pushed full forward and engine

torque dropped. Engine was shut down and engine fire warning light came on. Fire handle was pulled and toggle switch was flipped to left. Fire was not extinguished and observer ejected at 900 feet. Pilot checked trim and set autopilot, but then released it. He tried to jettison canopy, but it failed to move. As he brought his hand down, he pulled No. 2 fire handle, rechecked trim, pulled secondary handle, and ejected at 600-700 feet. Aircraft hit trees, crashed in right wing-low attitude, and burned. Pilot and observer sustained minor injuries. Caused by failure to use engine fire emergency procedures outlined in TM 55-1510-204-10. No. 2 engine was shut down and propeller feathered instead of burning No. 1 engine. No preparation was made to continue single engine flight and 2,000 pounds of fuel and drop tanks were not jettisoned. The second fire extinguishing bottle was not activated into the burning engine, and No. 1 engine fuel-oil shutoff valve was not actuated when fire light came on. No. 1 engine fire caused by fuel from ruptured line.

020708-Pilot thought he was too high on final and reduced power to flight idle, with full flaps. Aircraft entered rapid rate of descent at 90 knots, and power was increased too late to recover. Aircraft was flared, but fell through and left main gear hit runway. Left rear trunnion bearing failed in upward direction and left gear rotated on front trunnion bearing, pushing rear trunnion up through wing. Thrust was reversed, then control lever was moved out of reverse to regain directional control. Aircraft slid forward, coming to rest on left wing fuel tank, right main landing gear, and nosewheel. Caused by steep angle of approach, rapid rate of descent, and failure to go around.

021910-Aircraft took off in IFR conditions under radar departure control for night reconnaissance mission. Within 3 minutes, aircraft disappeared from radar screen and no further contact was made. Crashed aircraft was found 4 hours after the accident. Pilot and observer were killed. Neither had attempted to eject. Aircraft was destroyed by extremely high deceleration forces. Cause unknown.

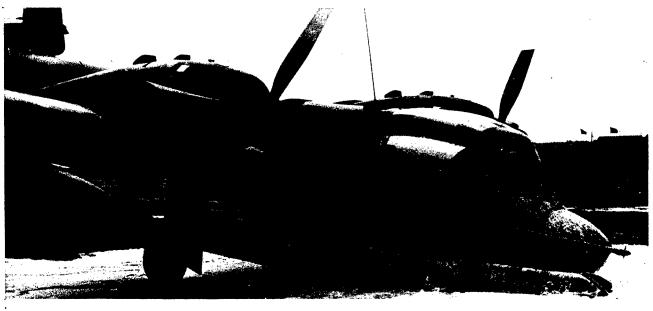
022305-While on takeoff roll, just prior to rotation, pilot saw object in center of runway and tried to avoid it by applying right aileron and aft elevator. Loud noise was heard as aircraft became airborne. After landing gear was retracted, pilot noted maximum airspeed was 140 knots, instead of usual 180 knots, and landed. Caused by lower half of 55-gallon drum being blown onto runway by a passing helicopter, damaging horizontal stabilizer, landing gear, and shrink rod.

040404-Loud bang was heard and No. 1 engine failed. Propeller was feathered and flight was continued with external stores. During attempt to land, visibility was so low that pilot was too close to field for standard approach pattern. Slight right turn was made to base leg, then shallow left turn to final. Flaps and gear were lowered in turn, and engine was throttled back to 40 psi. Pilot overshot final and turn was continued to get back on final. He went around at 300 feet and 100-105 knots to avoid landing too far down runway. Full power was applied and landing gear retracted. Pilot stated he retracted flaps and had to use right aileron and rudder to correct left wing-low tendency. Airspeed fell off rapidly and No. 2 engine torque dropped from 80 to 78 psi. Full right aileron and rudder were applied to keep aircraft from rolling left. Observer ejected at 100 feet and pilot ejected at 50-75 feet and 80 knots. Aircraft hit ground, cartwheeled, and burned. Pilot and observer sustained minor injuries. Caused by allowing aircraft to get below controllable airspeed.

Other factors were (1) failure of No. 1 engine, (2) failure to jettison external stores, (3) high density altitude (2,600 feet), (4) limited visibility, (5) nonstandard and hurried approach, and (6) variation in terrain, leading pilot to believe that he was higher than he actually was. Landing area was 300 feet higher than adjoining terrain. Engine failure was caused by galled annular ball bearing which failed, disengaging fuel control drive and resulting in loss of fuel control and fuel starvation. Inspection of accessory gearbox also revealed teeth on Zerol gears chipped and misaligned by ratcheting.

060307-During low level surveillance mission, aircraft entered clouds covering upper half of mountain. Ground observers saw ball of fire and heard explosion. Aircraft hit trees and turned left, plowing through trees and jungle growth. Pilot and observer were killed and aircraft destroyed. Indications were that pilot either ejected manually or his seat fired on impact, while observer remained in aircraft. Cause unknown.

061707-Landing approach was fast and high. Aircraft touched down left wing low in midsection of runway. Initial impact was on nose gear, causing aircraft to bounce. It hit again on nose gear and nose gear fork assembly broke, collapsing nose gear. Aircraft slid down runway 800 feet and emergency shutdown was made. Caused by failure to correct for crosswind and failure to abort high, fast approach. At time of accident, the first 200-foot section of runway was closed for repair. The entire runway had deep holes and was covered by large rocks. Pilots reported gear struts would "bottom out" during takeoffs and landings. Analysis of the nose gear fork assembly from this aircraft showed that failure was caused by dynamic overstresses.



061707

# Selected Incident Briefs

**F684-**Refueling door came open and sliced hole in fuselage skin. Caused by failure of refueling door latch.

**G387**-Left cockpit hatch came open and bent. Suspect hatch was not properly secured.

G763-IP felt pull and vibration like flat tire on right side during landing roll. Incident damage to landing gear door. Bolt that holds right landing gear upper and lower scissor arms together was missing.

**H250**-Right main tire blew out at 60 knots during takeoff. Pilot reversed propellers to abort, and rocks on runway surface were thrown into side of aircraft and SLAR antenna. Incident damage to right propeller, nosewheel doors, and SLAR antenna. Blowout caused by tire hitting rocks on runway.

H464-Aircraft struck bird at 500 feet after takeoff, damaging No. 1 engine ring cowl.

**H601-**Pilot made low landing approach. Incident damage to scissors bolt and fairing of right main gear. Details not reported.

020207-Left drop tank fell off during takeoff. Incident damage to tank. Caused by malfunction of wing mounting lock.

020901-Avionics bay hatch was left open during preflight. Hatch flew open during landing, causing two punctures in top of fuselage.

060103-Aircraft swerved off left side of runway into sand during landing. Incident damage to propellers. Possible damage to main struts. Strong gusty wind considered factor.

## Selected Precautionary Landing Briefs

**F470-**No. 2 engine failed and propeller was feathered. Suspect failure of No. 2 and No. 3 bearings.

**F644-**No. 2 engine torque pressure rose 7-8 pounds during climb. Power was reduced and chip detector warning light came on. Engine was shut down. No further details reported.

F759-No. 2 engine chip detector warning light came on and engine failed 10 minutes later. Extreme damage to compressor section found. Suspect ingestion of shrapnel from rockets fired by aircraft.

**F844-**No. 2 engine indicated excessive fuel consumption (900 pounds in 55 minutes). Caused by defective fuel pressure indicator gauge.

G243-Nosewheel indicator gave unsafe indication. Caused by broken wire to microswitch in wheel well.

**G327-**Hydraulic system failed and landing gear was blown down. Hydraulic failure caused by ruptured line in leading edge of left wing.

G536-Chip detector warning light came on. Caused by fuzz on plug.

**G537-**Hydraulic system failed. Caused by crack in No. 1 hydraulic pump housing.

**G580-**No. 1 engine lost oil pressure and smoke trailed from exhaust. Power was reduced and aircraft landed. No further details reported.

**G667-**No. 2 engine failed during takeoff and pilot aborted. Small bearing ball found on magnetic sump plug. Suspect failure of accessory gearbox bearing.

**G669-**Hydraulic system failed. Caused by loose fitting on hydraulic line to accumulator.

**G688**-Nose gear gave unsafe indication. Caused by sticking landing gear indicator.

G825-No. 1 engine chip detector warning light came on. Metal chip found on detector plug.

H386-No. 2 engine lost torque pressure. Engine was shut down and propeller feathered. Caused by failure of main fuel manifold.

**H457-**No. 2 propeller rpm could not be reduced. Propeller surged as descent was started for return to airfield. Pilot feathered propeller to prevent possible overspeed. Caused by failure of No. 2 propeller retaining plug.

H790-Aircraft was cruising at 6,000 feet in instrument conditions when crew noted strong odor that smelled like burning paraffin. Approximately 5 minutes later, both engine-driven d.c. generator load meters jumped from 25 to 150 amps. No. 1 inverter was isolated as problem and circuit breaker pulled. Expedited routing and letdown were requested and approved by ATC. About 20 minutes later, while descending to 2,000 feet, still in instrument conditions, burning odor returned. About two minutes later, odor became stronger and fluctuations were noted in instruments. ARC-51 ceased to transmit or receive and inverter was shut off. Aircraft commander descended to 1,500 feet and VFR conditions, proceeded to airfield, and landed. Caused by failure of inverters. Both found burned and very hot.

020219-Top left cowl assembly of No. 1 engine came loose during takeoff. Cowl was improperly secured during PE.

021015-No. 1 engine lost torque pressure and pilot smelled fuel fumes. Engine was shut down. Caused by failure of fuel manifold.

030501-Hydraulic system failed during landing approach. Aircraft was diverted to another field and landed. Caused by failure of windshield wiper cylinder.

051003-Chip detector warning light came on. Caused by short circuit in chip detector plug.

051113-No. 1 engine egt went to zero. Caused by failure of thermocouple and harness assembly.

051601-Hydraulic pressure gauges read zero. When gear failed to drop, it was recycled with negative results. Gear was blown down on short final. Loss of hydraulic fluid caused by loose locknut.

## OV-1 ACTIVE MWO'S

MWO No.	Date	Title	Aircraft or Comp Affected	Bal inge No	on 2	cord 408-5 No
55-1510-204-20/1	16 Nov 64	Installation of second fire extinguisher for engine compartment	OV-1A 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858	х	х	
-20/3	8 May 64	Inspection and rerout- ing of throttle control wiring	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3737 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745, 60-3754, and 60-3755 YOV-1 57-6463 thru 57-6467 57-6538 thru 57-6541 and 60-3742	х	х	
-20/4	14 Nov 66	Modification of the engine deicer electrical circuit	OV-1A 59-2604, 59-2606, 59-2608 thru 59-2610 and 59-2612 59-2614 thru 59-2620 60-3721 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858	х	х	
-20/7	3 Jun 63	Replacement of neo- prene flex ducts with silicon ducts	OV-1A 59-2603 thru 59-2619 60-3720 thru 60-3723 60-3725 thru 60-3742 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3755 YOV-1 57-6463, 57-6464, 57-6466, and 57-6467 57-6538 thru 57-6540	х	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/l Cha Yes	nge	Recon 24 Yes	108-5
5-1510-204-20/8	18 Mar 63	Remove slack from battery disconnect cables to prevent chafing	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858		x	X	
-20/9	7 Mar 63	Replacement of seat adjusting switch hous- ing	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858		х	X	
-20/12 hange 3	18 Nov 66 14 Feb 68	Replacement of special washer on knee bolt of main landing gear torque arms			X	X	

MWO No.	Date	Title	Aircraft or Comp Affected		Bal inge No	Rec on 24 Yes	108-5
55-1510-204-30/1	9 Jan 67	Modification of AN/ASW-12 autopilot warning light circuit	OV-1A 60-3721 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3737 60-3739 thru 60-3741 60-3743 thru 60-3744 OV-1B 59-2627 thru 59-2631 59-2633 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3757 60-3759 thru 60-3761 61-2676 thru 61-2677 61-2680, 61-2681, 61-2683, 61-2685, and 61-2686 61-2688 thru 61-2690 61-2692 thru 61-2699 61-2703 61-2708 thru 61-2710 61-2713 and 61-2714 61-2717 thru 61-2722 61-2726 thru 61-2728		x	x	
-30/3 Change 1	13 Jun 66 29 Jul 66	Installation of LS-59A photographic flasher system	OV-1A 59-2604 thru 59-2620 60-3721 thru 60-3744 63-13115 thru 63-13134 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2682 61-2685 thru 61-2703 61-2709 thru 61-2728 62-5852 thru 62-5858	х		х	
-30/4	14 Apr 66	Rework of MK-J5 ejection seat electrical disconnect bracket	OV-1A, OV-1B, OV-1C and YOV-1 OV-1A and OV-1C: Rec. type plus		х	x	
-30/25	2 Aug 67	Modification to Aero 65 bomb rack safety pin	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 64-14238 thru 64-14273 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858		x	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes	nge	Reco on 24 Yes	08-5
55-1510-204-34/1	8 May 62	Installation of revised pilot's control stick grip	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2681		х		х
-34/2 Change 1	22 Jun 61 23 Oct 61	Installation of aluminum alloy tubing fuel-feed lines; wing nacelle	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744	х			x
-34/3 Change 1	20 May 64 20 Jul 64	Installation of interim (V/H) optical scanner and converter system	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2698	Kit A	Kit B	х	
-34/6	8 May 62	Installation of flight line tracking device	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3730 OV-1B 59-2621 thru 59-2637		х		х
-34/11 Change 2	22 Apr 63 5 Oct 63	Relocation of auto- feather arming switch	OV-1A 58-2603 thru 59-2620 OV-1B 59-2621 thru 59-2637 YOV-1 57-6467, 57-6538, and 57-6541		х	x	
-34/12	13 Nov 63	Avionics installation of copilot's control stick ICS and radio switches	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2681		x	х	
-34/13 Change 1	2 Nov 61 29 May 62	Installation of ARC-44 radio dynamotor switch	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745	х			x

MWO No.	Date	Title	Aircraft or Comp Affected			Recon 24 Yes	08-5
55-1510-204-34/14 Change 1	3 Jun 63 28 Aug 67	Installation of bracket- ry for oil pressure transmitter	OV-1A 59-2603 thru 59-2613 59-2615 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 YOV-1 57-6463, 57-6464, 57-6466, and 57-6467 57-6538 thru 57-6540		х	х	
-34/17 Change 2	27 May 63 23 Apr 65	Avionics - Replace- ment of stores selector switch	OV-1A 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2710		х	x	
-34/19 Change 1	14 Nov 63 23 Jun 65	Revision of ground track beacon installa- tion and installation of ARC-44 FM squelch switch	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3747 60-3750 thru 60-3761 61-2675 thru 61-2701		х	х	
-34/20	29 May 62	Reinforcement of main wheel fairing - wing	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3747	х			x
-34/21	29 May 62	Extension of engine shroud to prevent impingement of engine nacelle skin	OV-1A 59-2603 thru 59-2619 60-3720, 60-3721, and 60-3723 60-3725 thru 60-3727 60-3731 60-3739 thru 60-3741 60-3743 and 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3746 thru 60-3749	x			х

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/I Cho Yes	inge	Reco on 24 Yes	08-5
55-1510-204-34/22 Change 1	16 Aug 62 29 Jan 64	Reinforcement of the engine nose cowl	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3747	х			х
-34/23	8 May 63	Reinforcement of main wheel door assembly	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3755	х		x	
-34/24 Change 1	26 Apr 66 1 Jun 67	Modification for im- proved performance of Martin-Baker escape system	All OV-1A, -1B, -1C, and YOV-1 aircraft with Martin-Baker ejection system		х		х
-34/25 Change 2	28 Aug 63 18 Apr 65	Modification of pilot's stick grip autopilot re- lease button	OV-1A 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2701 61-2703, 61-2705, 61-2711, and 61-2712 61-2714 thru 61-2721 61-2724 62-5849 thru 62-5850		x	х	
-34/28	13 Feb 64	Replacement of nacelle fasteners	OV-1A 59-2603 thru 59-2610 59-2612 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3741 60-3743 and 60-3744 OV-1B 59-2621 thru 59-2631 59-2633 thru 59-2637 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2701 61-2703 61-2705 thru 61-2728 YOV-1 57-6463, 57-6464, 57-6466, and 57-6467 57-6536, and 57-6539		x	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Bal inge No	Reco on 24 Yes	08-5
55-1510-204-34/32	3 Jun 63	Repositioning of vent hose and electric cables to propeller auxiliary motor	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2634 OV-1C 60-3745 thru 60-3747 60-3749 thru 60-3761 61-2675 thru 61-2699 YOV-1 57-6463, 57-6464, 57-6466, 57-6467 57-6538 thru 57-6540	х	х	
-34/36 Change 1	20 Mar 63 5 Jul 63	Riveting of rudder trim tab control wheel	OV-1A 59-2603 thru 59-2619 60-3720 thru 60-3723 60-3725 thru 60-3742 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3747 60-3750 thru 60-3761 61-2675 thru 61-2682	x	х	
-34/37 Change 1	25 Feb 66 13 Apr 67	Replacement of the fuel drain bracket	OV-1B 62-5861 thru 62-5865 62-5868 thru 62-5873 62-5877 and 62-5878	х	х	
-34/38	4 Sep 62	Reinforcement of oil tank scupper	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 OV-1C 61-2675 thru 61-2692	х	х	
-34/40	6 Jun 68	Modification of emergency canopy torque tube and installation of pneumatic escape hatch actuator retainer card assembly		x	<b>x</b>	

MWO No.	Date	Title	Aircraft or Comp Affected	Bal ange No	Recon 24 Yes	108-5
55-1510-204-34/42	28 Oct 64	Replacement of AN/ APS-94 inverter, SLAR system	OV-1B 59-2627 thru 59-2631 59-2633 62-5859 thru 62-5866	x	х	
-34/45	29 May 62	Stenciling of baggage compartment load limits for crewmembers	OV-1A 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637	x		x
-34/47 Change 2	8 Jun 65 27 Jul 67	Installation of engine chip detector system	OV-1A 59-2604 59-2606 thru 59-2610 59-2612 59-2614 thru 59-2620 60-3721 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3744 63-13114 thru 63-13119 63-13121 thru 63-13134 OV-1B 59-2621 thru 59-2623 59-2625 thru 59-2631 59-2633 thru 59-2637 62-5859 thru 62-5880 62-5882 thru 62-5906 64-14238 thru 64-14273 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2677 61-2679 thru 61-2689 61-2690 thru 61-2700 61-2703 thru 61-2705 61-2708 thru 61-2722 61-2724 61-2726 thru 61-2728 62-5854 thru 62-5858	x	x	
-34/48 Change 1	27 Jan 65 13 Mar 67	Installation of antenna AT-1108( )/ARC (37R-2U)	OV-1A 59-2604 and 59-2606 59-2608 thru 59-2610 59-2612 59-2614 thru 59-2620 60-3721 thru 60-3723 60-3725 thru 60-3744 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761	X	X	
			61-2675 thru 61-2677 61-2679 thru 61-2701 61-2703 and 61-2705 61-2708 thru 61-2724			

MWO No.	Date	Title	Aircraft or Comp Affected	Cho	Bal inge No	Rec on 24 Yes	08-5
55-1510-204-34/49	13 Apr 65	Installation of T53-L-7 engines in lieu of T53-L-3 engines	OV-1B 59-2621 thru 59-2626 59-2634 thru 59-2637 62-5859 thru 62-5860 OV-1C 60-3745, 60-3754, 60-3758, 61-2685, 61-2687, 61-2721, and 62-5851	Not r porte MWO	d on	x	
-34/50	11 Dec 63	Relocation of generator cooling air duct	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2714	х		х	
-34/51	2 Aug 62	Rework of aircraft skin adjacent to hoist point	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2680 YOV-1 57-6463 thru 57-6467 57-6538, 57-6541, and 60-3742		x	х	
-34/53	27 Jan 67	Installation of provisions for KA-60 panoramic camera system	OV-1A 59-2604 thru 59-2620 60-3721 thru 60-3744 63-13115 thru 63-13134 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2682 61-2685 thru 61-2703 61-2709 thru 61-2728 62-5852 thru 62-5858	х		х	
-34/54	6 Sep 63	Modification of engine starting system and oil system	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2621 thru 59-2637 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2687	х		х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cho Yes	inge	Rec on 24 Yes	08-5
55-1510-204-34/56	29 Apr 64	Replacement of landing gear lever assembly	OV-1A 59-2603 fhru 59-2620 60-3720 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3741 60-3743 and 60-3744 OV-1B 59-2621 thru 59-2631 59-2633 thru 59-2637 62-5859 thru 62-5906 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2701 61-2703 61-2705 thru 61-2728 62-5849 thru 62-5858 YOV-1 57-6463 thru 57-6464 57-6466 thru 57-6467 57-6538 and 57-6539		x	x	
<b>-</b> 34/58	26 Aug 63	Modification of provision for infrared equipment	OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3759 61-2675 thru 61-2681 61-2683 thru 61-2701		х	х	
-34/59	24 Mar 64	Installation of provisions for armament systems	OV-1A 59-2603 thru 59-2610 59-2612 thru 59-2620 OV-1C 61-2702 and 61-2704 61-2706 thru 61-2710 61-2713, 61-2722, and 61-2723 61-2726 thru 61-2728 62-5851 thru 62-5858		х	x	
-34/62	17 Dec 64	Installation of AN/ASW-12(V) autopilot	OV-1C 61-2675 thru 61-2677 61-2679 thru 61-2681 61-2683 thru 61-2698 61-2703, 61-2714, 61-2717 and 61-2718 61-2721 thru 61-2722 61-2726 thru 61-2728 62-5851 thru 62-5852 62-5854 thru 62-5858	х		х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes	nge	Rec on 24 Yes	08-5
55-1510-204-34/63	2 Mar 67	Replacement of wind- shield anti-ice and wash reservoir with one of increased quality	OV-1A 59-2604 and 59-2606 59-2608 thru 59-2610 59-2612 59-2614 thru 59-2620 60-3721 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3744 OV-1B 59-2621 thru 59-2623 59-2625 thru 59-2631 59-2633 thru 59-2637 62-5859 thru 62-5880 62-5882 thru 62-5880 62-5882 thru 62-5901 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2677 61-2679 thru 61-2686 61-2688 thru 61-2700 61-2703 61-2708 thru 61-2722 61-2724 61-2726 thru 61-2728 62-5849 and 62-5852 62-5854 thru 62-5858	x		X	
-34/64	5 Jun 63	Modification of the marker beacon receiving facility to install radio receiver, R-1041A /ARN, upon failure of radio receiving set, AN/ARN-68, or radio receiver, R-737/ARN	OV-1A 59-2603 thru 59-2606 59-2608 thru 59-2626 60-3720, 60-3721, 60-3723, and 60-3725		х	х	
-34/66	10 Jun 64	Locking of control surface balance weight through bolts	OV-1A 59-2603 thru 59-2606 59-2608 thru 59-2620 60-3725 thru 60-3729 60-3731 thru 60-3741 60-3743 thru 60-3744 OV-1B 59-2627 thru 59-2631 59-2633, 62-5859, and 62-5860 OV-1C 60-3747 and 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2701 61-2703 61-2705 thru 61-2713 61-2715 thru 61-2717 61-2719 thru 61-2728 62-5849 thru 62-5857		х	x	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes	nge	Reco on 24 Yes	108-5
55-1510-204-34/66	10 Jun 64	Locking of control sur- face balance weight through bolts	YOV-1 58-6464, 57-6467, 57-6538, and 57-6539		х	х	
-34/68	11 Jul 63	Reactivation of the OV-1 propeller auxiliary pump motor in the reverse mode	OV-1B 62-5859 thru 62-5906 OV-1C 61-2702 thru 61-2728 62-5849 thru 62-5858		х	х	
-34/69 Change 1 2	15 Jan 64 19 May 65 27 May 65	Revision of the AN/ ASW-12 wiring to ac- commodate flight line analyzer test set	OV-1A 60-3720 thru 60-3744 OV-1B 59-2627 thru 59-2633 62-5859 thru 62-5866 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858		х	х	
-34/70	6 May 66	Modernization of Martin-Baker ejection seats, MKJ5 series	OV-1A, -1B, -1C, and YOV-1 Y43-1 thru Y43-431 ejection seats		x	х	
-34/71	26 Nov 65	Installation of Doppler memory light on pilot's instrument panel	OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906		х	х	
-34/73	24 Sep 65	Installation of counting accelerometer (electronics)	OV-1A 63-13116 thru 63-13117		х	х	
-34/74	6 May 66	Installation of message drop chute	OV-1A 59-2604 and 59-2606 59-2608 thru 59-2610 59-2612 59-2614 thru 59-2620 60-3721 thru 60-3723 60-3725 thru 60-3737 60-3739 thru 60-3744 OV-1B 59-2621 and 59-2622 59-2626 thru 59-2631 59-2633 59-2635 thru 62-5865 62-5862 thru 62-5865 62-5868 thru 62-5879 62-5886 thru 62-5883 62-5886 thru 62-5890 62-5892 thru 62-5897 62-5899 thru 62-5904 62-5906	x		х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes		Rec on 24 Yes	08-5
55-1510-204-34/74	6 May 66	Installation of message drop chute	OV-1C 60-3746 thru 60-3748 60-3750 thru 60-3753 60-3755 thru 60-3757 60-3759 and 60-3760 62-5849 and 62-5852 62-5854 thru 62-5858	х		х	
-34/75 Change 1	12 Aug 66 13 Mar 67	Separation and rerouting of emergency and normal landing gear operating lines	OV-1 59-2604 and 59-2606 59-2608 thru 59-2610 59-2612 59-2614 thru 59-2620 OV-1B 59-2621 thru 59-2623 59-2625 thru 59-2631 59-2633 thru 59-2637 62-5859 thru 62-5880 62-5882 thru 62-5893 62-5895 thru 62-5906 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3757 60-3759, 60-3761, 61-2676, 61-2677, 61-2680, and 61-2681 61-2683 thru 61-2689 61-2692 thru 61-2699 61-2703 61-2708 thru 61-2710 61-2713 and 61-2714 61-2717 thru 61-2722 61-2727, 61-2728, 62-5849, and 62-5852 62-5854 thru 62-5858		х	x	
-34/77 Change 1	26 Apr 66 1 Jun 67	Replacement of the Martin-Baker ejection seat (MKJ series) top latch mechanism	OV-1A, -1B, -1C, and YOV-1 All aircraft with Mar- tin-Baker ejection seats, S/N Y43-1 thru Y43-535		x		x

MWO No.	Date	Title	Aircraft or Comp Affected			Recon 24 Yes	08-5
55-1510-204-34/79	12 Sep 66	Elimination of interference between autopilot and VHF navigation receiver	OV-1A 60-3721 thru 60-3723 60-3725 thru 60-3729 60-3731 thru 60-3737 60-3739 and 60-3741 60-3743 thru 60-3744 OV-1B 59-2621 thru 59-2622 59-2626 thru 59-2631 59-2633 59-2635 thru 59-2637 62-5859 thru 62-5903 OV-1C 60-3745 thru 60-3748 60-3750 thru 60-3761 61-2675 thru 61-2677 61-2679 thru 61-2686 61-2688 thru 61-2700 61-2703 61-2708 thru 61-2711 61-2713 thru 61-2722 61-2724 61-2726 thru 61-2728 62-5849 and 62-5852 62-5854 thru 62-5858		x	х	
-34/80	1 Sep 66	Installation of provisions for protective armor system	OV-1A, -1B, and -1C As directed by theater commander	х		х	
-34/81 Change 1	26 Apr 66 13 Mar 67	Removal of catalytic filter from engine bleed line	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 OV-1B 59-2627 thru 59-2633 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858	x		X	
-40/1	15 Dec 65	Incorporation of manual personnel parachute separation system into Model MK-J5 ejection seats	OV-1A, -1B, -1C, and YOV-1 Martin-Baker seats S/N Y43-1 thru Y43- 22		x	x	

MWO No.	Date	Title	Aircraft or Comp Affected	Bal nge No	Rec on 24 Yes	08-5
55-1510-204-40/3	12 Apr 67	Modification of in- board aileron preload bungees	OV-1A 59-2603 thru 59-2620 60-3720 thru 60-3744 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 64-14250 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728 62-5849 thru 62-5858 YOV-1 57-6464 57-6466 thru 57-6539	х	х	
55-1560-200-34/1	29 Mar 66	Modification of 150- gallon Aero, 1C, ex- ternal fuel tanks (55- 48328-503) from 2-fin configuration to 4-fin configuration	OV-1A, -1B, -1C, and YOV-1 All aircraft with ex- ternal fuel tanks, PN 5548328-503	x	х	
55-1600-200-50/1	22 May 63	Modification of propeller pitch lock mechanism of propeller assembly 53C51-9, and propeller control, 544060	OV-1A and OV-1B All aircraft with propeller control 544060 OV-1C and YOV-1 All aircraft with propeller assembly 53C- 51-9 and propeller control 544060	х	х	
55-1610-201-30/1 Change 1	18 Oct 65 1 Jun 67	Propeller bearing assembly attaching parts change	OV-1A and YOV-1 All aircraft with pro- peller assembly 53C51-9 and 53C51-23	х	х	
-30/2 Change 1	1 Oct 63 13 Apr 65	Improved locking technique of propeller slip ring mounting bolts	OV-1A, -1B, -1C All aircraft with pro- peller assembly 53C51	х	х	
-50/3	13 Nov 63	Modification of pitch- lock assembly to pro- peller barrel alignment	OV-1A All aircraft with 53C51-23 propellers	х	х	
55-1610-209-35/1	30 Sep 64	Modification of pro- peller control to pro- vide front and rear en- cased plain seals	OV-1A, -1B, -1C, and YOV-1 All aircraft with pro- peller control 544060 and 557996	х	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes		Rec on 24 Yes	108-5
55-1610-209-50/1	6 Aug 63	Modification of pro- peller control to pro- vide buffer piston and shutter valve assembly	OV-1A, -1B, -1C, and YOV-1 All aircraft with pro- peller controls 544060 and 557996		x	х	
-50/2	25 Oct 63	Modification of pro- peller control to eliminate pressurizing valve seal exposure	OV-1A All aircraft with pro- peller controls 544060 and 557996		x	х	
-50/5	13 Nov 63	Modification of pro- peller control decrease activation pressure of cutout switch	OV-1A All aircraft with pro- peller control 557996		х	x	
55-1680-200-20/1 Change 2	7 Jun 65 6 Jun 66	Modification of safety lap belts (54H19650) type MD-1 (54H19651) type MD-2 incorporate spring, lap belt webbing retarder (62B4407)	OV-1A, -1B, -1C, and YOV-1 All MD-1 and MD-2 safety lap belts		x		х
55-1680-255-30/2 Change 1	30 Nov 67 5 Apr 68	Martin Baker MK-J5 ejection seat installa- tion of drogue para- chute removable hardshell container	OV-1A, -1B, -1C, and YOV-1 All aircraft with MK-J5 ejection seat and 9E1A seat trainer	x			х
55-2800-200-20/1	6 Aug 63	Replacement of ignition exciter units	OV-1C All aircraft with T53-L-3 engines		х	х	
-30/1	5 Apr 65	Provisions to meter starting fuel	OV-1A, -1B, -1C, and YOV-1 All aircraft with T53-L-3 engines		х	х	
-40/1 Change 1	15 Aug 63 7 Jan 64	Rework of main lubricating filter assembly (SP933) on engine (T53)	OV-1C All aircraft with filter assembly SP933 installed		х	х	
-50/2 Change 1	15 Aug 63 11 Dec 63	Modification of first stage turbine blade wedges, engine (T53)	OV-1C All aircraft with -3 engines		х	х	
-50/4 Change 1	1 Oct 63 19 Mar 64	Incorporation of intershaft seal and modified accessory gearbox (T53-L-3 and T53-L-5 engines)	OV-1C with T53-L-3 engines		х	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/I Chai Yes	nge	Recon 24 Yes	08-5
55-2800-200-50/5	3 Jun 63	Modification of com- pressor housing assembly (T53-L-3 and T53-L-5 engines)	OV-1C with T53-L-3 engines		х	х	
55-2800-202-30/1	27 Jul 67	Inspect and rework of No. 3 and 4 bearing housing rings in the power turbine and bearing housing assembly	OV-1A, -1B, -1C, and YOV-1 with T53-L-3 engines LE02001 thru LE02449 and T53-L-7 engine LE05000 thru LE05345		х	x	
55-2840-201-30/1	8 Apr 63	Replacement of fuel control topping governor rod	OV-1A, -1C with T53- L-3 engines using TA-2A fuel control		х	х	
-40/1 Change 1	17 Jun 65 1 Jun 67	Retrofit of T53-L-3 engines with T53-L-7 helical reduction gearing	OV-1B with T53-L-3 engines	х		x	
-50/5 Change 1	11 Jul 63 7 Jun 65	Replacement of power shaft	OV-1C with T53-L-3 engines, S/N LE02015 thru LE02233 LE02237 thru LE02250 LE02252 thru LE02262		x	х	
55-2840-210-30/1 Change 1	20 Nov 64 15 Jan 65	Replacement of low pressure fuel line on T53-L-7 engine	OV-1B with T53-L-7 engines LE05001 thru LE05160		x	х	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/l Chai Yes	nge	Reco on 24 Yes	08-5
11-1510-204-35/1	5 Dec 62	Modification of the synchrophaser electronic unit (P/N 54917 manufactured by the Hamilton Standard Division) to reduce vibration and power fluctuations in the aircraft	OV-1A, -1B, and -1C All S/N -324 with SN EY-1980 thru 1987, 2382 thru 2391 2709 thru 2722 3229 thru 3238 3663 thru 3673 4846 thru 4855 5167 thru 5176 5661 5875 thru 5883 6724 thru 6741 7662 and 7666		N/A		х
11-5821-204-20/1	21 Sep 66	Modification of terminal box J-562/AR to provide compatibility between radio set AN/ARC-44 and narrow band frequency modulated (FM) communication radio sets	OV-1B All W/J-562 box using AN/ARC-44 radio		N/A		х
11-5821-244-30/2 Change 1	17 Aug 66 1 Mar 67	Modification of radio set AN/ARC-54 to provide (X) mode operation	OV-1A, -1B, and -1C All AN/ARC-54 with RT-348 by Collins Radio Co. S/N 1 thru 3676 with transmitaudio module S/N's ending in A thru L on P/O 20866-PP-63, FR 28-043-P6-00099E and FR 28-043-P6-00634E. S/N 3677 thru 3923 on P/O FR 28-043-P5-00690E transmit-audio modules with S/N's ending in M and N require only partial modification, modules with S/N's ending in O, P, and Q, and up require no modification		N/A		х
11-5826-200-35/1 Change 1	29 Jul 65 1 Apr 66	Modification of receiver group AN/ARA-54 to provide ten additional glideslope receiving channels	OV-1A, -1B, and -1C All AN/ARA-54 with R-746 Bendix Model MN-100A and MN-100A -1 and all R-746A on P/O 3228-PP-59 and 4134-PP-60. All C-2065 without S2 switch section		N/A	x	

MWO No.	Date	Title	Aircraft or Comp Affected	Wt/Bal Change Yes No	Record on 2408-5 Yes No
11-5841-217-35/2	2 Nov 65	Modification of interconnection box J-1123 A/APN-129, part of navigation set, radar AN/APN-129A(V) 1 to reduce failure of relay K2610 and to prevent premature tripping of the "A" phase circuit breaker.	OV-1A, -1B, and -1C Applied to intercon- necting boxes J-1123A/ APN-129 procured on order no. 41013-PZ-62	N/A	x
11-6615-231-50/1	14 Oct 65	Modification of coupler, navigational CU-7921 ASW-12 (V) to eliminate radio interference to automatic flight control system AN/ASW-12(V)	All CU-792 on P/O 0109-PH-58, 3398-PP- 59, 4408-PP-60,	N/A	x
11-6615-232-40/1	28 Oct 65	Modification of calibration unit MX-2917/ASW-12(V) to improve performance of AN/ASW-12(V)	OV-1A, -1B, and -1C All MX-2917 on P/O 0109-PH-58, 3398-PP- 59, 4408-PP-60, 5056- PP-61, 41012-PZ-62	N/A	х
11-6615-232-40/2	28 Oct 65	Modification of calibration unit MX-2917/ASW-12(V) to improve performance of AN/ASW-12(V)	OV-1A, -1B, and -1C Calibrator unit MX- 2919/ASW-12V on P/O 0109-PH-58, 3398-PP-59, 4408- PP-60, 5056-PP-61, and 41012-PZ-62	N/A	x

## OV-1 TB'S

TB No.	Date	Title	Aircraft or Comp Affected		Reco on 24 Yes	08-5
55-1510-204-10/2	10 Sep 65	Comparative torque gage readings for T53-L-3 and T53-L-3A engines	All OV-1 aircraft with T53-L-3A engines installed	х	х	
-10/3	26 Oct 65	Lateral control pro- blem when flaps are in down position and hydraulic pressure is lost	All OV-1 aircraft	x		X
-20/2	3 Apr 63	Inspection of inboard aileron pushrod assembly	All OV-1 aircraft	x		х
-20/14	3 Sep 64	Inspection of timed release mechanism and drogue gun trip rods on MK-J5 series ejection seats	All YOV-1, OV-1A, OV-1B, and OV-1C aircraft with MK-J5 series ejection seats, serial numbers Y43-1 thru Y43-453	х		х
-20/15	12 Jan 65	Inspection of ejection seat (MK-J5) primary cartridge "O" ring seal	All YOV-1, OV-1A, OV-1B, and OV-1C aircraft with MK-J5 ejection seats, serial numbers Y43-1 thru Y43-453	х		x
-20/17	3 May 66	Inspection of Martin-Baker MK-J5 series ejection seats	MK-J5 ejection seats Y43-1 thru Y43-16 Y43-21, Y43-22 Y43-24 thru Y43-34 Y43-44 thru Y43-46 Y43-51, Y43-52 Y43-59, Y43-60 Y43-73 thru Y43-75 Y43-78 thru Y43-99 Y43-104 thru Y43-106 Y43-109 thru Y43-111 Y43-114, Y43-117, Y43-119 thru Y43-122 Y43-125 thru Y43-128 Y43-144 thru Y43-146 Y43-154, Y43-155, Y43-159, Y43-162, Y43-163, Y43-170, Y43-173 Y43-187, and Y43-188 Y43-202 thru Y43-205	X		х

TB No.	Date	Title	Aircraft or Comp Affected	Wt/ Cha Yes	nge	Reco on 24 Yes	08-5
55-1510-204-20/17	3 May 66	Inspection of Martin-Baker MK-J5 series ejection seats	Y43-208 and Y43-209 Y43-218 thru Y43-225 Y43-228 thru Y43-231 Y43-234 thru Y43-241 Y43-253 thru Y43-256 Y43-259 and Y43-260 Y43-273 thru Y43-277 Y43-279, Y43-282, Y43-285, Y43-286, Y43-290, Y43-291,		x		x
-20/19	19 May 66	Inspection of the engine fire extinguishing system	OV-1A 63-13114 thru 63-13134 OV-1B 59-2621 thru 59-2637 62-5859 thru 62-5906 OV-1C 60-3745 thru 60-3761 61-2675 thru 61-2728		x		x